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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,003	10/30/2003	Itzhak Bentwich	050992.030010USCP	1002
37808 7590 07/10/2007 ROSETTA-GENOMICS c/o PSWS 700 W. 47TH STREET SUITE 1000 KANSAS CITY, MO 64112			EXAMINER SHIN, DANA H	
			ART UNIT 1635	PAPER NUMBER
			MAIL DATE 07/10/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/707,003	Applicant(s) BENTWICH, ITZHAK.	
	Examiner Dana Shin	Art Unit 1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-23 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22, 34 and 35 is/are allowed.
- 6) ☒ Claim(s) 21, 23, 32, 33 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 15, 2007 has been entered.

### ***Status of Claims***

Claims 21-23 and 32-36 are currently pending and under examination on the merits.

### ***Response to Arguments***

Applicant's arguments with respect to claims 21 and 23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Priority***

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) and 120 as follows:

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The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551; 32 USPQ2d 1077 (Fed. Cir. 1994).

None of the disclosure of the prior-filed applications except Application No. 10/604,984, provides adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. All pending claims in the instant application are directed to SEQ ID NO:3588 or fragments thereof. It is found that 10/604,984 is the first prior-filed application that disclosed the nucleotides of SEQ ID NO:3588 of the instant application. Although some of the prior-filed applications contain SEQ ID NO:3588, the nucleotides encompassed by SEQ ID NO:3588 in those applications are different from those claimed in the instant case. Accordingly, the benefit of an earlier filing date is granted only insofar as the filing date of 10/604,984, which is August 29, 2003.

If applicant believes that the exact 24 nucleotides of instant SEQ ID NO:3588 are adequately supported in the disclosure of applications prior to 10/604,984 in the manner provided by the first paragraph of 35 U.S.C. 112, applicant is strongly encouraged to point out the SEQ ID NO corresponding to the instant SEQ ID NO:3588.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 23, and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Mounts et al. (US 2007/0031850 A1).

The claims are drawn to an isolated nucleic acid of 24 to 120 nucleotides, comprising a sequence at least 79.2% identical to SEQ ID NO:3588.

Mounts et al. teach an isolated nucleic acid of 25 nucleotides in length comprising SEQ ID NO:273968 (“Db”), 20 nucleotides of which perfectly align with nucleotides of SEQ ID NO:3588 (“Qy”) of the instant application as shown below, thereby rendering 80% sequence identity between SEQ ID NO:273968 of Mounts et al. and SEQ ID NO:3588 of the instant application.

Qy	2	CACCAGAATGCTAGTTTGTAGAG	24
Db	2	CACCAGAAGGCTATTTGTACAG	24

They also teach an isolated nucleic acid of 25 nucleotides in length comprising SEQ ID NO:273971 (“Db”), 20 nucleotides of which perfectly align with nucleotides of SEQ ID NO:3588 (“Qy”) of the instant application as shown below, thereby rendering 80% sequence

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identity between SEQ ID NO:273968 of Mounts et al. and SEQ ID NO:3588 of the instant application.

```
Qy      2 CACCAGAATGCTAGTTTGTAGAG 24
          ||||| |||| ||||| ||
Db      1 CACCAGAAGGCTATTTTGTACAG 23
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Accordingly, all of the claim limitations are taught by Mounts et al.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 23, 32-33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mounts et al. (US 2007/0031850 A1) as applied to claims 21, 23, and 32-33 above, and further in view of Paul et al. (*Nature Biotechnology*, 2002, 29:505-508).

Claims 21, 23, and 32-33 are described above.

Claim 36 is directed to a vector comprising any of the nucleic acids of claims 21, 23, and 32-33.

Mounts et al. teach two nucleic acids of SEQ ID NO: 273968 and SEQ ID NO: 273971 that are 80% identical to SEQ ID NO:3588. Mounts et al. do not teach a vector comprising either SEQ ID NO:273968 or SEQ ID NO:273971.

Paul et al. teach a vector comprising an isolated nucleic acid, which allows long-term expression of the isolated nucleic acid in human cells and potentially in whole organisms. See entire reference.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a vector comprising either one of SEQ ID NO: 273968 and SEQ ID NO: 273971 of Mounts et al.

One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success because Paul et al. teach that an isolated nucleic acid expressed from a vector is more stable and thus can be expressed in human cells for a longer period of time and potentially can be expressed in whole organisms. Since the technique and knowledge of inserting isolated nucleic acids into a vector were known and available in the art at the time the invention was made, the instantly claimed invention taken as a whole would have been *prima facie* obvious at the time of filing.

### ***Conclusion***

Claims 21, 23, 32-33, and 36 are rejected.

Claims 22 and 34-35 appear free of the prior art searched of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Shin whose telephone number is 571-272-8008. The examiner can normally be reached on Monday through Friday, from 8am-4:30pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Douglas Schultz can be reached on 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dana Shin  
Examiner  
Art Unit 1635

/J. E. Angell/  
Primary Examiner  
Art unit 1635